

DECIMALISATION OF THE BRITISH CURRENCY.

(Read 11th September, 1917.)

In a decimal notation every figure represents ten times as much as the one standing to the right of it. In a decimal currency the coins should progress in a like manner, thus: £1, £0·1, £0·01, £0·001.

Existing "decimal" currencies.

The so-called decimal currencies at present existing are none of them made up in that way. They are in the main binary systems. Nearly every coin is twice the value of the one next below (not ten times). Payments made in coins of these systems are, however, recorded in decimals and decimal fractions of one of the coins. The systems of account are therefore decimal, while the actual currencies are not.

The following is a list of the coins in use in the countries composing the "Latin" Monetary Union (France, Italy, Belgium, Switzerland, and Greece), Germany, United States, Russia, and Japan, all of which countries have that system of currency commonly spoken of as decimal. It will be seen that there is no single instance of a coin which is ten times as valuable as the one next below it, as there should be in every case if the currency were as truly decimal as is the method of recording amounts:—

LATIN MONETARY UNION (ALSO SPAIN).

									Ratio.
Bronze	...	...	Centime	...	...	...	...	...	...
			2 Centimes	...	...	...	...	...	2
			5 "	...	...	...	...	...	2½
			10 "	...	...	...	...	...	2
Silver	...	...	20 "	...	...	...	...	...	2
			50 "	...	...	...	...	...	2½
			FRANC	...	...	...	...	...	2
			2 Francs	...	...	...	...	...	2
Gold	...	...	5 "	...	...	...	...	...	2½
			10 "	...	...	...	...	...	2
			20 "	...	...	...	...	...	2
			50 "	...	...	...	...	...	2½
			100 "	...	...	...	...	...	2

UNITED STATES.

									Ratio.
Bronze	...	...	Cent	...	...	...	...	...	...
Nickel	...	...	5 Cents	...	...	...	...	...	5*
Silver	...	...	Dime (10 cents)	...	...	...	...	...	2
			Quarter (25 cents)	...	...	...	...	...	2½
			Half (50 cents)	...	...	...	...	...	2
			DOLLAR	...	...	...	...	...	2
Gold	...	...	2½ Dollars	...	...	...	...	...	2½
			5 "	...	...	...	...	...	2
			10 "	...	...	...	...	...	2
			20 "	...	...	...	...	...	2

* In the United States Mint Report for 1916, page 8, the Director calls attention to the want of a 2½ cent piece. Many articles are sold at 5 cents because there is no other small coin but the one cent piece.

GERMANY.								
								Ratio.
Bronze	...	...	Pfennig	...	...	...	...	...
			2 Pfennige	...	...	...	...	2
Nickel	...	...	5	„	...	...	...	$2\frac{1}{2}$
			10	„	...	...	...	2
Silver	...	...	50	„	...	...	...	5
			MARK	...	...	...	...	2
			2 Marks	...	...	...	...	2
			5	„	...	...	...	$2\frac{1}{2}$
Gold	...	...	5	„	...	...	...	...
			10	„	...	...	...	2
			20	„	...	...	...	2

RUSSIA.								
								Ratio.
Silver	...	...	5	Kopecks	...	...	...	...
			10	„	...	...	...	2
			15	„	...	...	...	$1\frac{1}{2}$
			20	„	...	...	...	$1\frac{1}{3}$
			25	„	...	...	...	$1\frac{1}{4}$
			50	„	...	...	...	2
			ROUBLE	...	...	...	...	2
Gold	...	...	5	Roubles	...	...	...	5
			$7\frac{1}{2}$	„	...	...	...	$1\frac{1}{2}$
			10	„	...	...	...	$1\frac{1}{3}$
			15	„	...	...	...	$1\frac{1}{2}$

JAPAN.								
								Ratio.
Copper	...	...	1	Rin	...	...	...	...
			$\frac{1}{2}$	Sen	...	...	...	5
			1	„	...	...	...	2
			2	„	...	...	...	2
Nickel	...	...	5	„	...	...	...	$2\frac{1}{2}$
Silver	...	...	5	„	...	...	...	...
			10	„	...	...	...	2
			20	„	...	...	...	2
			50	„	...	...	...	$2\frac{1}{2}$
			YEN	...	...	...	...	2
Gold	...	...	5	Yen	...	...	...	5
			10	„	...	...	...	2
			20	„	...	...	...	2

Coins proceeding by decimal gradations would be inconvenient. A British currency consisting of four coins only—

Gold:	Sovereign	..	..	£1·000 (£1)
Silver:	Florin	..	..	·100 (2s.)
	Cent	..	..	·010 (2·4d.)
Bronze:	Mil	..	..	·001 (·24d.)

would be intolerable. In all the countries just mentioned, although in each case the unit of value is smaller than the pound sterling, an actual decimal currency has not been attempted. The value of the coins in every instance, except that of Russia, progresses by halves, quarters, or fifths of the next higher figure of the notation used for accounts.

The chief advantage of these systems is the method of accounting, by which fractions of the unit are recorded in the same notation as whole numbers, and arithmetical calculations thus simplified.

The decimal system of recording values appears to be most convenient when used in conjunction with the metric system of weights and measures. The two naturally go together, and in view of the widespread use of both systems, there is some ground for considering that it would be wise for Great Britain to adopt them. The change, however, would not be entirely advantageous.

Metric System.

The weakness of the metric system of weights and measures is that, while it accords with the decimal notation used for numbers, it does not accord with the natural way in which men always have divided, and always will divide, measure, and weigh the articles they have to deal with. No man who has to divide any article into small portions would ever naturally think of cutting it into fifths or tenths. Indeed he would find it a difficult thing to do. He would instinctively divide into halves, and then each half again into halves, obtaining quarters, eighths, sixteenths, thirty-seconds, etc.

It will be seen, therefore, that there is a fundamental difficulty due to the fact that the natural way to count (based originally on counting by the fingers) is by tens, and the natural way to divide is into fourths, eighths, etc. If men had been furnished with four fingers instead of five, then perhaps counting would have been done by eights, and the difficulty which has now to be dealt with would never have arisen.

It is obviously impossible to abandon the decimal method of counting. The only questions to be settled are what are the best ways of reckoning weights, measures, and values. British weights and measures are somewhat complicated, although in the main they are more suitable for dealing with division into fourths, eighths, etc., than is the metric system. That system has, however, already been so widely adopted that the only practical choice seems to be between it and the existing tables. Advocates of the compulsory introduction of the metric system are apt to minimise the trouble and expense which it would involve. The trade of the British Empire and of the United States would be disturbed for a long time, and loss, running possibly into millions of pounds, would be incurred in order to arrive at uniformity with the methods employed by nations which have not as much trade as these two great English-speaking countries.

Referring to the proposed compulsory use of the metric system the "Engineering and Mining Journal" of New York speaks of it as a threatened calamity of the first order. It adds that it would lead to changes of the thousands of standards of materials and all sorts of units upon which American industry is based. Manufacturers would be confronted by the necessity of changing gauges, patterns, etc., at costs running to 1,000,000 dollars even in individual

cases. Engineers would lose the old factors and data of work, materials, costs, etc., which from long experience have accumulated in their minds. An *American Institute of Weights and Measures* has been formed, the objects of which are the following: "*The maintenance and improvement of our present (English) system of weights and measures, for the good of our commerce and industry and the well-being of our country. The education of the people with respect to the importance of our weights and measures, through the dissemination of correct information with respect to them, and to the danger inherent to changes to our basic standards of measurement. The improvement of old and the development of additional standards as they may be needed by reason of new conditions in commerce, industry, science, and engineering. The promotion of wise legislation for the conservation of our basic (English) units of weights and measures, and opposition to hasty and ill-considered legislation involving changes from our fundamental (English) standards.*" *

Drawbacks to decimal fractions.

It will be found that persons using decimal weights and measures constantly resort to little devices by which they get away from the use of fractions. When the metre is used by engineers for measuring machinery, a length of, say, 2.385 metres is nearly always recorded as 2385 mm., although the millimetre can hardly be considered a suitable unit for such a measurement. In the bullion trade, and in the Mints, pure gold or silver is represented by unity, but the clumsiness of speaking of all metal below purity as .555, .916, .650, etc., etc., is such that in practice pure gold is called 1000 and standard gold 916.6, and thus this decimal system of recording fineness is mostly referred to as the millesimal system. Superior as this system undoubtedly is to the old scale of carats and grains, it is unfortunate that when used to indicate the fineness of standard gold, it exemplifies the most serious drawback to the use of decimals, viz., the recurring fraction. Standard gold contains eleven twelfths of pure metal. Under the old system it was shown as 22 carat (*i.e.* 22/24ths). This was a simple, accurate, and easily understood statement. By the decimal system it is recorded as .916, which does not convey such a clear idea, and is not quite accurate. Moreover, when used in calculation this recurring fraction involves more work, and yet can never give completely accurate results.

In calculations in which the figure representing the fineness of standard gold is concerned, time is saved and accuracy attained by abandoning the use of the incomplete decimal fraction in favour of the accurate vulgar fraction. If, for instance, it is required to

* "Engineering," London, 16th March, 1917, page 248.

find out how many ounces of sovereigns would be equivalent to 9189·95 ounces of fine gold, the result is promptly and correctly attained by adding one-eleventh to the weight, thus:

$$\begin{array}{r} 9189\cdot95\text{—fine gold} \\ 835\cdot45 \\ 10025\cdot40\text{—standard gold} \end{array}$$

The figure 835·45 would also represent the weight of the alloying metal which would be present in a mass of 10,025·40 ounces of sovereigns. To a person knowing only that standard gold was $\cdot91\dot{6}$ fine, and not realising that that figure was the equivalent of 11/12ths (as he probably would not if decimals were universally employed), the calculation would be $9189\cdot95 \div \cdot91\dot{6}$. Before division by $\cdot91\dot{6}$ was begun it would be necessary to decide at what point the last 6 should be taken as 7. Taking it as $\cdot916667$ the result would be $10,025\cdot39 +$, a figure which is not quite accurate. In every instance of a recurring decimal fraction lack of accuracy is unavoidable.

The advocates of the universal use of decimals usually pass lightly over the fact that simple fractions such as thirds, sixths, sevenths, and twelfths cannot be accurately expressed. The words one seventh convey a clear and simple idea, but the row of figures $\cdot142857$ repeating does not. The main advantage of decimal fractions is the reduction of quantities to a common denominator; simplifying calculations. The main advantage of vulgar fractions is the facility they offer for reduction to lowest terms, and therefore to terms most easy to comprehend.

The drawbacks to the metric system are obvious, and cannot be overcome. Its advantages, however, are also great. Whether its use should be enforced in British dominions is a matter that should not be settled without very wide investigation into its probable effects. If it should be adopted it would be desirable to introduce a decimal currency as well. British weights and measures are not inconvenient in themselves, or, at any rate, their intrinsic drawbacks are not more obvious than those of the metric system, which necessitates the division of objects into the inconvenient fractions, fifths and tenths, and does not provide for dealing with other fractions the use of which cannot always be avoided, viz. thirds, sixths, sevenths, and twelfths.

It may, however, be found desirable, as in the cases of the United States and Canada, to use a decimal money of account while leaving the weights and measures as they are.

Should it be decided to adopt a decimal money of account, it will be necessary to settle which of the various possible methods is the one which has the most to recommend it.

Pound and Mil.

If the pound be taken as the unit of account, it will be necessary to alter the names of the coins below the value of a shilling, dividing that coin into 50 mils (instead of 48 farthings), and introducing a new penny of five of these smaller farthings (mils) instead of four. The present penny could not be retained, as it would have to be shown in accounts as £0·00416, an entry so clumsy as to be out of the question.

The scale of this *pound and mil* scheme would be as follows:—

Coins.						Entries in Accounts. £
Gold	...	Sovereign	...	(1,000 mils)	...	1·000
	...	Half-sovereign	...	(500 „)	...	·500
Silver	...	Five Shillings	...	(250 „)	...	·250
	...	Half-crown	...	(125 „)	...	·125
	...	Florin	...	(100 „)	...	·100
	...	Shilling	...	(50 „)	...	·050
	...	25-Mils	...	(= the old sixpence)	...	·025
	...	12½ „	...	(= the old threepence)	...	·0125
Bronze	...	10 „	...	(= 2·4 pence)	...	·010
	...	5 „	...	(= 1·2 penny)	...	·005
	...	2½ „	...	(= 1·2 halfpenny)	...	·0025
	...	Mil	...	(= ·96 of the old farthing)	...	·001

The only coins which would be changed in actual value would be the penny, halfpenny and farthing, which would be replaced by the new penny (5 mils) of the value of $1\frac{1}{5}$ d., and the new halfpenny ($2\frac{1}{2}$ mils) of the value of three-fifths of a penny, and the new farthing equal to ·96 of the old one. The ten mil piece would in time probably take the place of the threepence. So far as the coins are concerned, therefore, this scheme could be introduced with but little interference with the existing state of things. Accounting, however, would present difficulties. A system by which the familiar sum of 3d. had to be shown as £0·0125, and a (new) penny as £0·005, would be inconvenient to all, and incomprehensible to many. It is one which it is safe to say the British public would not be likely to accept.

Florin and Cent.

To avoid the difficulty of recording all amounts less than £1 by means of decimal fractions, it has often been suggested that the florin, itself the tenth of a pound, should be adopted as the money of account. This would have the advantage that the figures in the tens and hundreds columns of integers would stand for units and tens of pounds. By leaving a space between the column for the units and tens, the figures representing pounds would stand out clearly, and there would practically be three divisions showing pounds, florins, and cents ($2\frac{2}{5}$ d.) in place of the three now used for £ s. d. It would, however, probably be more confusing to have figures in what used to be the shillings column standing for florins,

and those in the old pence column for $2\frac{2}{5}$ d., than to adopt a more completely unfamiliar-looking system.

The outstanding objection to the florin and cent scheme is that people would have to set about learning to think of values in unfamiliar terms. This is not an easy matter. I have been assured by Americans in England that until they have mentally converted our prices into equivalents in dollars it is difficult for them to feel sure as to what they really mean. Similarly British people are vague in their apprehension of the value of prices in francs, dollars, or other foreign units. They instinctively proceed to convert them into equivalents in the familiar sterling terms in order to make no mistake. With the majority of men the apprehension of values is indissolubly bound up with the terms of the unit familiar to them in childhood and youth. If therefore the change to a decimal notation can be attained without the introduction of an unfamiliar unit, much will have been gained.

The scale of the *florin and cent* scheme would be as follows:—

Coins.								Entries in Accounts. Florins.
Gold	...	Sovereign	...	...	...	...	...	10.00
	...	Half-sovereign	...	...	...	...	...	5.00
Silver	...	Florin	...	...	(Of 100 cents)	...	...	1.0
	...	Shilling	...	...	(Of 50 cents)	...	...	.50
	...	25 cents	...	...	(= the old sixpence)	...	...	.25
	...	20 "	...	...	(= 4.8 of the old pence)	...	...	.20
	...	10 "	...	...	(= 2.4 "	...	...	.10
Bronze	...	5 "	...	...	(= 1.2 "	...	...	.05
	...	4 "	...	...	(= .96 "	...	...	.04
	...	2 "	...	...	(= .48 "	...	...	.02
	...	Cent	...	...	(= .24 "	...	...	.01
	...		...	...		...	...	

It will be seen that, as in the case of the pound and mil, there would be a coin of the value of $1\frac{1}{5}$ of a penny of the existing currency, but by the interpolation of a coin of four cents a nearer approximation to the value of the old penny could be obtained, viz. .96d. The sixpence would have to bear a new name—25 cents—while the six coins below the sixpence would bear unfamiliar names and also be of new values. This would necessitate alterations in the prices of all small articles, and result in considerable inconvenience and possible loss, particularly to those least able to bear it.

Shilling and Cent.

The sovereign has now been in use for a hundred years, and has obtained such a stable position in public regard that it would be unwise either to do away with it or alter it in any way. It could, however, be retained as the standard of value and the chief medium of exchange, without also being used as the money of account. Even at the present time, in the case of sums under £5,

business men have a habit of speaking and accounting in shillings instead of pounds. Prices are quoted as 30s., 55s., 66s., etc., instead of £1 10s., £2 15s., and £3 6s., etc. It would not be so very difficult to extend this existing system, and to record all values in shillings and decimals of a shilling. This would not be convenient for dealing with large sums. It is not, however, possible to select a unit equally suited for recording small as well as large amounts. The experience of other countries seems to show that it is more important to consider the convenience of the whole of the people who must always be conducting small transactions, rather than those few who, in addition to their personal retail dealings, have also to do with large sums in the prosecution of their trade or profession.

The unit of account in France, Belgium, Italy, Switzerland, Greece, and Spain is equal in value to 9·52 pence, in Germany to 11·47d., in Norway, Sweden, and Denmark to 13·215d., in Holland to 19·82d., and in Austria-Hungary to 10d.

The extension of the shilling from the position of an occasional unit of account to that of a universal one would place Great Britain more into line with Continental countries, and it would impose no heavier burden on persons dealing with large amounts than is at present borne in other important countries. All values would have to be recorded in shillings and decimal fractions of a shilling. A new penny, the tenth instead of the twelfth of a shilling, would have to be introduced, exactly as it would if the pound and mil system were adopted. In accounts, however, this new penny would appear as 0·1, instead of 0·005. The advantage is obvious. The first figure to the right of those standing for shillings would, as at present, indicate pence (that is the new pence of $1\frac{1}{5}$ d. in value). The new halfpenny would be shown as 5 in the next place. As, however, amounts less than halfpence are but seldom required, no harm would be done if conservatively minded tradesmen continued to record halfpence by the old sign $\frac{1}{2}$. The public would thus be confronted with very little alteration in the appearance of accounts of retail transactions.

A slight difficulty occurs regarding the names to be given to the new half and quarter shillings. If it were not for the fact that there are already two coins in circulation of precisely the same value, known as the sixpence and threepence, it would be natural and obvious to call them fivepence and twopence halfpenny. In the transition period, however, there would then be two coins of the same value circulating side by side, one of which would be called a sixpence of the old currency, and the other a fivepence of the new. A simple solution of this difficulty is to divide the shilling into 100 cents; the new half-shilling could then be called 50 cents, and the new quarter shilling 25 cents. The penny would be ten cents, and the halfpenny five cents. The chief objection to

this is that it would add one more to the large number of cents of various values already in existence. It would perhaps be better simply to call these pieces Halves and Quarters. The scale of the *shilling and cent* scheme would be as follows:—

Coins.								Entries in Accounts. Shillings.
Gold	...	Sovereign	...	...	...	...	...	20·00
		Half-sovereign	...	...	...	...	...	10·00
Silver	...	Crown	...	...	...	...	...	5·00
		Half-crown	...	...	...	...	...	2·50
		Florin	...	...	...	...	...	2·00
		Shilling	...	(Of 100 Cents)	...	...	...	1·00
		Half	...	(Or 50 Cents)	= Sixpence	...	...	·50
		Quarter	...	(Or 25 Cents)	= Threepence	...	...	·25
Bronze	...	Ten Cents	...	= $1\frac{1}{5}$ of the old penny	...	...	...	·10
		Five Cents	...	= $1\frac{1}{5}$ of the old halfpenny	...	...	...	·05
		Cent	...	= ·96 of the farthing	...	...	...	·01

The only coins to be altered in value would be the penny, half-penny, and farthing. There would be no new coins.

A decimal money of account cannot be introduced without some alterations and inconvenience. The shilling and cent scheme seems to present the line of least resistance in this respect. The only burden it would involve, that of using more figures when recording large amounts, would fall mainly upon those institutions and individuals best able to bear it. A small incidental advantage would be that the number of figures required to represent such enormous amounts as those of the national debts of the countries now at war would be roughly the same in England as on the Continent, and comparison, when required, would thus be simplified. As such large figures do not easily convey a clear idea, a further special unit of 100 shillings (£5) might be introduced. This could be indicated simply by leaving a space between the column for tens and hundreds, the figures to the left of which could then be read as so many “fivers” or “quintans,” or whatever name might be selected for this special unit for large amounts.

An objection has often been raised in the past both to the pound and mil and to the shilling and cent schemes on the ground that the increase in the value of the penny would cause serious loss to the community. At the present time, when war has caused prices to rise so enormously, this does not strike the mind as a very serious matter. If, when peace is re-established, it is found possible to reduce prices to a level of only one fifth more than they were before the war, then most people will be agreeably surprised.

There is no subject upon which men’s minds are more conservative and suspicious of change than the currency. To obtain popular approval, a new system, however beneficial, must involve as few alterations in familiar names and standards as possible. For this reason the three foregoing schemes, each of which takes for the

money of account an amount represented by a familiar existing coin, have a much better chance of success than any scheme in which a new unit of value would have to be used.

Schemes involving alteration of the standard of value.

The Royal Decimal Commission of 1859 reported that "a coinage which necessarily involves the disturbance of the pound sterling would in the present state of public opinion be unadvisable and, in fact, impracticable." At that time the sovereign had only been in existence for 42 years. It has now been the standard of value, the chief gold coin, and the principal money of account for 100 years. About 1,000 millions of these coins have been coined and issued. Public objection to any interference with it would probably be greater now than ever, while the actual inconvenience which any change would cause would be more widespread than it would have been 58 years ago.

Several proposals involving the abandonment of the sovereign, or an alteration in the amount of gold selected to bear that name, have been suggested.

Gold piece of 25 francs.

A Royal Commission sat in 1868 to consider the subject of an international coinage, particularly with regard to the recommendation of a Conference held at Paris which had suggested an international coinage on the basis of—

1. The adoption of the single gold standard.
2. The adoption of 9/10ths as the proportion of fine gold in the coins.
3. That all gold coins hereafter struck in any of the countries which are parties to the Convention should be either of the value of five francs or multiples of that sum.
4. That a gold coin of the value of 25 francs should be struck by such countries as prefer it and be admitted as an international coin.

The Royal Commissioners pointed out that "the reduction of the value of the pound" (that is to say to 19s. 10d. the value of the gold in a 25-franc piece) "would disturb all existing obligations and would cause many and serious difficulties," and they concluded their report adversely to the proposal to substitute a 25-franc piece for the sovereign.

Gold Dollar.

Canada does not, and cannot, because of her proximity to the United States, use the British currency system, and it would be desirable, if possible, to adopt some plan by which both the sovereign (containing 113.0016 grains of pure gold) and the dollar

(containing 23·22 grains of pure gold) would be able to take a place. In the British halfpenny and the United States cent there is practical identity, the halfpenny passing for ·2354 of a grain of pure gold and the cent for ·2322 of a grain. It has been suggested that a system might be adopted beginning with the halfpenny or cent and having pieces of 5, 10, 25, and 50 cents, a four shilling piece (or dollar) of 100 cents, and a new sovereign, or five dollar piece, of the value of 20/6·5685d. of the present currency. This proposal, which has been called the *Empire coinage*,* would provide coins as follows:—

				Value in Sterling		Value in Dollars.
Gold	...	...	Sovereign ...	(10 florins) ...	20s. 6·6d. ...	5
			Half-sovereign ...	(5 florins) ...	10s. 3·3d. ...	2½
Silver	...	...	Double-florin ...	(2 florins) ...	4s. 1·32d. ...	1
			Florin ...	(100 mils) ...	2s. 0·66d. ...	·50 cents
			Half-florin ...	(50 ") ...	1s. 0·33d. ...	·25 "
			Florin ...	(25 ") ...	6·165d. ...	·12½ "
Nickel	...	...	Brit. Dime ...	(10 ") ...	2·466d. ...	·5 "
			Half-dime ...	(5 ") ...	1·233d. ...	·2½ "
Bronze	...	...	Penny ...	(4 ") ...	·9864d. ...	·2 "
			Half-penny ...	(2 ") ...	·4932d. ...	·1 "
			Farthing ...	(1 ") ...	·2466d. ...	·½ "

* See London "Economist," 21st April, 1917, p. 701.

This system arrives at uniformity with the American dollar by effecting some alteration in the value of every British coin now in use. It would in fact be nothing but a wholesale adoption of the American system disguised by calling a cent a halfpenny, a 2 cent piece a penny, a 50 cent piece a florin, and the dollar a double florin.

If such a scheme were adopted there would be, during the period of change, which must last several years, two sorts of coins called halfpence, pence, florins, double florins, sovereigns, and half-sovereigns circulating side by side, each of slightly different value. Confusion, and opportunity for mistakes and fraud, would arise. The use of the old familiar names would not alter the fact that the new currency would be the American currency intact, except that accounts would be kept in the new single florin, or half-dollar, instead of in the new double-florin, or dollar. It would be better to adopt the American currency *en bloc*, with the gold dollar as standard of value, rather than to try to disguise it with a dressing of familiar British terms.

It is most unlikely that the British people would consent to abolish the pound sterling, but if they were willing to do so, it would probably serve more useful ends for the country to enter the "Latin Monetary Union," and to adopt the gold franc as the standard of value. France, Belgium, Italy, Switzerland, and Greece, together with Spain, which has an identical system, have a population

of about 108 millions, living relatively close to Great Britain, as against about the same number of people living in the United States and Canada.

To abandon the ancient British currency, and to set up in its place either the French or the American system, would be a more serious and far-reaching undertaking than that which was reported unfavourably upon by the Royal Commission of 1868, and it would almost certainly be vetoed by public opinion.

Coins unsuitable for certain small payments.

In countries employing a decimal money of account goods are still divided into halves and quarters. When the value is small it is often found that there are no coins capable of being used to make up the amount payable, and the purchaser has to pay slightly more than he should do. Frequently the vendor then tenders his customer some practically worthless article as compensation for the over-payment. In the United States, where the smallest coin is equal to a halfpenny, and the next above it to $2\frac{1}{2}$ d., there are many occasions when the available coins do not adequately fulfil the office of a medium of exchange. The following figures show the fractions of a franc, and of an American dollar, which cannot be represented by coins in the case of payments for halves or quarters of goods sold at prices below ninepence:—

FRANCE.											
Article at	...	...	90	80	75	70	60	50	40	30	centimes
Half	...	...	45	40	37.5	35	30	25	20	15	
Quarter	...	...	22.5	20	18.75	17.5	15	12.5	10	7.5	
UNITED STATES.											
Article at	...	...	15	14	13	12	11	10	9	8	7 cents
Half	...	...	7.5	7	6.5	6	5.5	5	4.5	4	3.5
Quarter	...	...	3.75	3.5	3.25	3	2.75	2.5	2.25	2	1.75
ENGLAND.											
Article at	...	...	9	8	7	6	5	4	3	2	pence
Half	...	...	$4\frac{1}{2}$	4	$3\frac{1}{2}$	3	$2\frac{1}{2}$	2	$1\frac{1}{2}$	1	
Quarter	...	...	$2\frac{1}{4}$	2	$1\frac{3}{4}$	$1\frac{1}{2}$	1	1	$\frac{3}{4}$	$\frac{1}{2}$	

It will be seen that the existing British coins meet the requirements of every one of these cases, whereas there are *six French* and *twelve American* instances in which the amounts required cannot be made up by means of the coins which are available.

Australian Select Committee on Coinage.

In 1901 a Select Committee was appointed by the Australian Government "to inquire into the desirableness and expediency of the Commonwealth coining gold, silver, and copper coins, and adopting a decimal system of coinage."

In paragraph 11 of the Committee's Report it is stated that the retention of the sovereign as the standard of value is the only basis upon which a decimal coinage proposal would find favour in

Great Britain, and that the adoption of that basis in the Commonwealth would therefore be a movement on the lines likely to be followed by Great Britain. The suggestion to bring the proposed coinage into unison with that of the United States, and thus associate with one of the great decimal systems already in existence, deserved and received attention. It was decided, however, that the objections outweighed the advantages.

The Committee summarised their recommendations as follows:—

“1. That the Commonwealth adopt a decimal system of coinage and money of account.

“2. That the basis of the currency be gold, and expressed in the existing British sovereign.

“3. That the following coins of the existing system be adopted:—

“ the sovereign	half-sovereign	two-shilling piece	shilling	sixpence
“ 10 florins	5 florins	1 florin	$\frac{1}{2}$ florin	$\frac{1}{4}$ florin
“ 1,000 cents	500 cents	100 cents	50 cents	25 cents

“4. That a new coin, of the value of $22\frac{1}{5}$ d. of the existing currency, be coined in some mixed metal and made current as ten cents (one-tenth of a florin).

“5. That bronze coins of the value of—

1 1000th	1 500th	1 250th of a sovereign
1 100th	1 50th	1 25th of a florin

to be known as 1 cent, 2 cents, and 4 cents respectively, be coined to take the place of the existing bronze coinage.”

The Committee’s decision to recommend the retention of the sovereign as the standard of value is clear, but they did not state what unit it was proposed to adopt for the decimalised money of account. If it was intended to have all values recorded in pounds and decimals of a pound, then the difficulty to which I have already referred would arise, namely, that the small amounts constantly used in retail trade would be represented by awkward decimal fractions:—

A Shilling would be shown as	...	...	...	£0.05
Sixpence	”	”	...	0.025
Threepence	”	”	...	0.0125
Ten cents	”	”	...	0.01
4 cents	”	”	...	0.004
2 cents	”	”	...	0.002
1 cent	”	”	...	0.001

The word cent, however, should be used for the hundredth part of the money of account, but the Committee proposed that name for the thousandth part. This would seem to indicate that it was their intention to recommend that accounts be kept in florins. In that case the decimal fractions representing small amounts would be reduced by one figure, and to that extent be somewhat simpler

to deal with, though it would still be difficult to get used to keeping accounts in which three adjacent columns of figures no longer stood for pounds, shillings and pence, but for florins (2s.), 10 cents ($2\frac{2}{5}$ d.), and cents (approximately farthings), and by which the nearest thing to the old familiar penny would have to be shown as 0.04 of a florin.

The Australian Government hesitated to introduce this system without first knowing what the British Government was likely to do in a similar direction, and the decimalisation of the coinage, both in England and Australia, has not yet been accomplished.

Conclusion.

It will be seen that the decimalisation of the British currency is not a simple matter. In the first place the decimal system itself is by no means a perfect one, and it is not easy to be certain that its undoubted advantages are not equalled by its drawbacks.

Assuming, however, that it has been decided to adopt it, there are several schemes to choose from. It is almost universally admitted that the sovereign must be retained as the standard of value, and also as the chief gold coin. This at once cuts out the possibility of complete agreement with either of the other two great currency systems, the American and that of the Latin Union.

There are three main proposals as to the money of account. The Pound and mil, the Florin and cent, and the Shilling and cent. The adoption of any one of these must involve difficulty, and for a time at least some confusion. The question is: which system can be introduced with the least disturbance?

The outstanding advantage of the Pound and mil scheme is that large sums would be shown in the same way as at present, but its unsuitability for small amounts would be a constant source of difficulty and annoyance.

The Florin and cent scheme would enable pounds to be shown as at present by the simple device of leaving a space between the units and tens in the figures indicating florins. The decimal fractions representing the smaller sums would not be quite so unwieldy as in the former case. The necessity, however, for persons (accustomed to think of values in terms of pounds or shillings) to familiarise themselves with a notation showing all values in florins and tenths and hundredths of a florin constitutes a serious, if not a fatal drawback to this scheme.

The Shilling and cent scheme is by far the best for dealing with the small transactions of daily life, the shilling being already widely used as the money of account when comparatively small sums are dealt with. As a unit of account it would closely approximate to those of all the principal countries of western Europe.

The great drawback to this scheme is that the familiar record of large sums in pounds would disappear, and more figures would have to be used for this purpose than we are now accustomed to.

It is impossible to have a single unit of account which is equally convenient for both large and small sums. The decimal system, however, requires that only one unit of value be used. Either the bankers and dealers in large sums, or the small traders and the public generally, must be inconvenienced. A choice must be made. All the countries which have hitherto adopted a decimal money of account have chosen a small unit. If the British Empire is to follow suit in the matter of recording values by a decimal notation, it also would be wise to follow the same course.

Public usage has firmly established the shilling as a unit of value for amounts under £5. Its extension as the unit for all values could therefore be brought about without much difficulty.

When no possible course is free from some drawback it is not easy justly to assess the value of the advantages and disadvantages of the available alternatives. My own opinion is that the sovereign should in any case be retained as the standard of value, and that there is no occasion to have any other standard gold coin for the Empire. The half-sovereign, which has never been used for international purposes, and is an expensive coin to manufacture and to maintain, should be reduced from its status of a coin of full intrinsic worth to that of a token similar to the silver and bronze coins. I feel some doubt as to the wisdom of introducing a decimal money of account, but if it should be decided to do so, then the shilling should be the unit. Sums of less value than a shilling to be expressed in decimal fractions of a shilling. The tenth part of a shilling to be called a penny. In tradesmen's accounts there would be only two columns of figures, the first showing shillings and the second pence and decimal fractions of a penny. In accounts representing very large amounts hundreds of shillings (£5) could easily be treated as a convenient unit. The use of this special unit would reduce the number of symbols required to record vast sums of money. The coins forming the actual metallic currency would be those which are set out on page 24.
